

IN THE CLAIMS

Please cancel claims 1-16 and add new claims 17-31.

17. An apparatus for furnishing a working pressure in a fluid, the apparatus comprising a first region (10) in which a first pressure prevails that is higher than the working pressure,

a second region (12) in which the working pressure is to be furnished,

[means (14, 18, 20) for reducing the first pressure in the first region (10) to the working pressure in the second region (12), which means are disposed between the first region (10) and the second region (12) and include

a bore (18) with a structure varying in the longitudinal direction,

a piston (14) that is displaceable in the longitudinal direction in the bore (18) as a function of the pressure difference existing between the first region (10) and the second region (12), and

elastic means (20), which subject the piston (14) in the longitudinal direction to force which acts in the direction of the first region (10),

the piston (14) being embodied cylindrically and guided over its entire displacement path by the bore (18), the bore (18) being also embodied cylindrically and having a first portion (22) of greater inside diameter and a second portion (24) of smaller inside diameter, the first portion (22) of greater inside diameter communicating with the first region (10) of higher pressure, so that the resistance to the fluid is greater, the farther the piston (14) penetrates into the second portion (24) of smaller inside diameter.

18. The apparatus of claim 17, wherein the elastic means include at least one spring (20), which subjects the piston (14) to force on the side of the second region (12).

19. The apparatus of claim 17, wherein the pressure in the first region (10) is between about 200 and 1800 bar.

20. The apparatus of claim 18, wherein the pressure in the first region (10) is between about 200 and 1800 bar.

21. The apparatus of claim 17, wherein the working pressure in the second region (12) amounts to about 30 bar.

22. The apparatus of claim 17, further comprising a pressure-holding valve (16) in the second region (12).

23. The apparatus of claim 18, further comprising a pressure-holding valve (16) in the second region (12).

24. The apparatus of claim 19, further comprising a pressure-holding valve (16) in the second region (12).

25. The apparatus of claim 20, further comprising a pressure-holding valve (16) in the second region (12).

26. The apparatus of claim 21, further comprising a pressure-holding valve (16) in the second region (12).

27. The apparatus of claim 17, wherein in the first region (10), the pressure of a common rail prevails.

28. The apparatus of claim 17, wherein the second region (12) is the operating region of an injector.

29. The apparatus of claim 28, wherein the injector is a piezoelectric injector.

30. A method for furnishing a working pressure in a fluid, in which fluid is transferred from a first region (10) of high pressure into a second region (12) of lower pressure, and the pressure of the fluid is reduced with the aid of means (14, 18, 20) for reducing the pressure in the first region (10) to a pressure in the second region (12), and the means include a piston (14), guided longitudinally displaceably in a bore (18) and urged in the direction of the first region (10) by elastic means (20), and the bore (18) has a structure varying in the longitudinal direction, with a first portion (22) of greater inside diameter and a second portion (24) of smaller inside diameter, the method comprising reducing the pressure by varying the length of a throttle gap existing between the piston (18) and the second portion (24) of the bore (18) as a function of the pressure difference between the first and second regions (10, 12).

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31. The method of claim 30, further comprising compensation for an elevated working pressure by a pressure-holding valve (16).